

CLAIMS

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3 I claim:

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5 1. An automatically adjustable rear suspension for trike comprising a supply of pressurized gas  
6 pneumatically connected to a valve, at least one air spring pneumatically connected to said valve,  
7 said air spring being disposed between a trike swing arm and a trike frame, said valve being  
8 mechanically attached to said swing arm by means of a valve pushrod.

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10 2. The automatically adjustable rear suspension for trike of claim 1 wherein said trike swing arm  
11 further comprises at least one L arm, each said L arm comprising an L arm horizontal member  
12 rigidly attached to an L arm vertical member, each said air spring being disposed between one said  
13 L arm horizontal member and said trike frame.

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15 3. The automatically adjustable rear suspension for trike of claim 2 wherein said trike swing arm  
16 further comprises an axle, said valve pushrod mechanically connecting said axle and said valve.

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18 4. The automatically adjustable rear suspension for trike of claim 3 further comprising a gas  
19 shock absorber attached at one extreme to said trike frame and at an opposite extreme to said  
20 trike swing arm.

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22 5. The automatically adjustable rear suspension for trike of claim 4 wherein said supply of  
23 pressurized gas comprises an air compressor.

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2     6. The automatically adjustable rear suspension for trike of claim 5 wherein said supply of  
3     pressurized gas comprises an accumulator pneumatically connected to said compressor.

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5     7. The automatically adjustable rear suspension for trike of claim 6 wherein said accumulator is  
6     pneumatically connected to said valve by means of a valve supply line, and wherein said valve is  
7     connected to said at least one air spring by means of an air spring supply line.

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9     8. An automatically adjustable rear suspension for trike comprising a supply of pressurized gas  
10    pneumatically connected to a valve, two air springs pneumatically connected to said valve, each  
11    said air spring being disposed between a trike swing arm and a trike frame, said trike swing arm  
12    being pivotably attached to a motorcycle frame at a pivot point, said trike frame being rigidly  
13    attached to said motorcycle frame, said valve being mechanically attached to said swing arm by  
14    means of a valve pushrod.

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16    9. The automatically adjustable rear suspension for trike of claim 8 wherein said trike swing arm  
17    further comprises two L arms, each said L arm comprising an L arm horizontal member rigidly  
18    attached to an L arm vertical member, each said air spring being disposed between one said L arm  
19    horizontal member and said trike frame.

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21    10. The automatically adjustable rear suspension for trike of claim 9 wherein said trike swing arm  
22    further comprises an axle, said valve pushrod mechanically connecting said axle and said valve.

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1 11. The automatically adjustable rear suspension for trike of claim 10 further comprising a gas  
2 shock absorber attached at one extreme to said trike frame and at an opposite extreme to said  
3 trike swing arm.

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5 12. The automatically adjustable rear suspension for trike of claim 11 wherein said supply of  
6 pressurized gas comprises an air compressor.

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8 13. The automatically adjustable rear suspension for trike of claim 12 wherein said supply of  
9 pressurized gas comprises an accumulator pneumatically connected to said compressor.

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11 14. The automatically adjustable rear suspension for trike of claim 13 wherein said accumulator is  
12 pneumatically connected to said valve by means of a valve supply line, and wherein said valve is  
13 connected to said at least one air spring by means of an air spring supply line.

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15 15. A motorized tricycle comprising an automatically adjustable rear suspension for trike, said  
16 automatically adjustable rear suspension for trike comprising a supply of pressurized gas  
17 pneumatically connected to a valve, two air springs pneumatically connected to said valve, each  
18 said air spring being disposed between a trike swing arm and a trike frame, said trike swing arm  
19 being pivotably attached to a motorcycle frame at a pivot point, said trike frame being rigidly  
20 attached to said motorcycle frame, said valve being mechanically attached to said swing arm by  
21 means of a valve pushrod.

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1 16. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim  
2 15 wherein said trike swing arm further comprises two L arms, each said L arm comprising an L  
3 arm horizontal member rigidly attached to an L arm vertical member, each said air spring being  
4 disposed between one said L arm horizontal member and said trike frame.

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6 17. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim  
7 16 wherein said trike swing arm further comprises an axle, said valve pushrod mechanically  
8 connecting said axle and said valve.

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10 18. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim  
11 17 further comprising a gas shock absorber attached at one extreme to said trike frame and at an  
12 opposite extreme to said trike swing arm.

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14 19. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim  
15 18 wherein said supply of pressurized gas comprises an air compressor electrically connected to a  
16 motorized tricycle electrical system.

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18 20. The motorized tricycle comprising automatically adjustable rear suspension for trike of claim  
19 19 wherein said supply of pressurized gas comprises an accumulator pneumatically connected to  
20 said compressor.